

We claim:

1. Isolated nucleic acid encoding hepatitis B virus rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc or their complementary nucleic acids.  
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2. The nucleic acid of claim 1 which is human hepatitis B.
3. The nucleic acid of claim 2 which is intact infectious virus.
- 10 4. The nucleic acid of claim 2 which is about from 10 to 35 base pairs.
5. Nucleic acid encoding at least one of the hepatitis B virus mutants rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc, said nucleic acid being fused to heterologous nucleic acid.  
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6. Duck hepatitis B virus rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc.
7. A duck infected with duck hepatitis B virus rtN236T, rtA181V, rt181T, sL173F and/or sL172trunc.  
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8. Woodchuck hepatitis virus rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc.
- 25 9. A woodchuck infected with woodchuck hepatitis virus rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc.
10. A vector comprising the nucleic acid of claim 1.
- 30 11. A host cell transformed with a vector of claim 10.

12. A method comprising culturing a host cell of claim 11 and recovering rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc therefrom.
- 5 13. A composition comprising (a) isolated hepatitis B virus mutant rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc and/or (b) hepatitis B virus mutant rtN rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc fused to a heterologous polypeptide.
- 10 14. The composition of claim 13 wherein the mutant is bound to a detectable label, bound to an insoluble substance, or formulated in a pharmaceutically acceptable excipient.
- 15 15. The mutant of claim 13 in an infectious hepatitis B virus.
16. An antibody capable of specifically binding rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc.
- 20 17. The antibody of claim 16 bound to a detectable label, bound to an insoluble substance or formulated in a pharmaceutically acceptable excipient.
18. A method for immunotherapy comprising administering to a subject a composition of claim 13.
- 25 19. A method for immunotherapy comprising administering to a subject the antibody of claim 16.
- 30 20. A method for the treatment of HBV comprising administering adefovir to a subject infected with HBV, determining whether the subject is infected with HBV rtN236T, rtA181V, rtA181T, sL173F and/or sL172trunc and, if so, administering to

the subject an anti-HBV drug to which the HBV mutant is not adefovir cross-resistant.

21. The method of claim 20 wherein the adefovir and the drug are  
5 administered substantially simultaneously to the subject.

22. The method of claim 20 wherein the drug is selected from the group  
consisting of entecavir, L-dT, MCC-478, FTC, L-dC, L-FMAU, L-Fd4C,  
Lamivudine and tenofovir.  
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23. A method for the prevention of emergence of rtN236T, rtA181V, rtA181T,  
sL173F and/or sL172trunc in a subject undergoing therapy for HBV comprising  
administering adefovir and at least one non-cross resistant anti-HBV drug.

15 24. The method of claim 23 wherein adefovir and the anti-HBV drug are  
administered substantially simultaneously.

25. A diagnostic PCR kit for the HBV mutants rtN236T, rtA181V, rtA181T,  
sL173F and/or sL172trunc comprising primers capable of specifically amplifying  
20 an HBV rt or sAg sequence containing at least one of said mutants.